



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: E. Marlowe Goble et al.
Serial No.: 10/090,293
Filing Date: 03/04/02
Title: METHOD AND APPARATUS FOR SPINE
JOINT REPLACEMENT
Group Art Unit: 3738
Examiner: Unknown
Attorney's Docket No.: MED-3

Assistant Commissioner For Patents
Washington, D.C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR 1.56, 1.97 and 1.98, Applicants hereby make the following documents of record in the above-identified application:

U.S. Patents

- (1) U.S. Patent No. 3,867,728 issued 02/25/75 to Stubstad et al.
- (2) U.S. Patent No. 3,875,595 issued 04/08/75 to Froning
- (3) U.S. Patent No. 4,349,921 issued 09/21/82 to Kuntz
- (4) U.S. Patent No. 4,759,769 issued 07/26/88 to Hedman et al.
- (5) U.S. Patent No. 4,772,287 issued 09/20/88 to Ray et al.
- (6) U.S. Patent No. 4,863,477 issued 09/05/89 to Monson
- (7) U.S. Patent No. 4,904,260 issued 02/27/90 to Ray et al.
- (8) U.S. Patent No. 4,911,718 issued 03/27/90 to Lee et al.
- (9) U.S. Patent No. 5,047,055 issued 09/10/91 to Bao et al.
- (10) U.S. Patent No. 5,071,437 issued 12/10/91 to Steffee
- (11) U.S. Patent No. 5,147,404 issued 09/15/92 to Downey
- (12) U.S. Patent No. 5,171,280 issued 12/15/92 to Baumgartner
- (13) U.S. Patent No. 5,258,031 issued 11/02/93 to Salib et al.
- (14) U.S. Patent No. 5,306,308 issued 04/26/94 to Gross et al.
- (15) U.S. Patent No. 5,306,309 issued 04/26/94 to Wagner et al.
- (16) U.S. Patent No. 5,370,697 issued 12/06/94 to Baumgartner
- (17) U.S. Patent No. 5,458,642 issued 10/17/95 to Beer et al.
- (18) U.S. Patent No. 5,458,643 issued 10/17/95 to Oka et al.
- (19) U.S. Patent No. 5,437,672 issued 08/01/95 to Alleyne

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- (20) U.S. Patent No. 5,514,180 issued 05/07/96 to Heggeness et al.
- (21) U.S. Patent No. 5,527,312 issued 06/18/96 to Ray
- (22) U.S. Patent No. 5,534,028 issued 07/09/96 to Bao et al.
- (23) U.S. Patent No. 5,534,030 issued 07/09/96 to Navarro et al.
- (24) U.S. Patent No. 5,545,229 issued 08/13/96 to Parsons et al.
- (25) U.S. Patent No. 5,556,431 issued 09/17/96 to Büttner-Janz
- (26) U.S. Patent No. 5,571,189 issued 11/05/96 to Kuslich
- (27) U.S. Patent No. 5,572,191 issued 11/05/96 to Lundberg
- (28) U.S. Patent No. 5,645,597 issued 07/08/97 to Krapiva
- (29) U.S. Patent No. 5,653,762 issued 08/05/97 to Pisharodi
- (30) U.S. Patent No. 5,674,295 issued 10/07/97 to Ray et al.
- (31) U.S. Patent No. 5,674,296 issued 10/07/97 to Bryan et al.
- (32) U.S. Patent No. 5,676,701 issued 10/14/97 to Yuan et al.
- (33) U.S. Patent No. 5,683,464 issued 11/04/97 to Wagner et al.
- (34) U.S. Patent No. 5,702,450 issued 12/30/97 to Bisserie
- (35) U.S. Patent No. 5,716,415 issued 02/10/98 to Steffee
- (36) U.S. Patent No. 5,824,093 issued 10/20/98 to Ray et al.
- (37) U.S. Patent No. 5,824,094 issued 10/20/98 to Serhan et al.
- (38) U.S. Patent No. 5,865,846 issued 02/02/99 to Bryan et al.
- (39) U.S. Patent No. 5,868,745 issued 02/09/99 to Alleyne
- (40) U.S. Patent No. 5,893,889 issued 04/13/99 to Harrington
- (41) U.S. Patent No. 6,001,130 issued 12/14/99 to Bryan et al.
- (42) U.S. Patent No. 6,014,588 issued 01/11/00 to Fitz
- (43) U.S. Patent No. 6,019,792 issued 02/01/00 to Cauthen
- (44) U.S. Patent No. 6,039,763 issued 03/21/00 to Shelokov
- (45) U.S. Patent No. 6,063,121 issued 05/16/00 to Xavier et al.
- (46) U.S. Patent No. 6,066,325 issued 05/23/00 to Wallace et al.
- (47) U.S. Patent No. 6,080,157 issued 06/27/00 to Cathro et al.
- (48) U.S. Patent No. 6,113,637 issued 09/05/00 to Gill et al.
- (49) U.S. Patent No. 6,132,464 issued 10/17/00 to Martin
- (50) U.S. Patent No. 6,132,465 issued 10/17/00 to Ray et al.
- (51) U.S. Patent No. Re. 36,758 issued 06/27/00 to Fitz
- (52) U.S. Patent No. 5,401,269 issued 03/28/95 to Büttner-Janz et al.
- (53) U.S. Patent No. 5,192,326 issued 03/09/93 to Bao et al.

Foreign Patents

- (54) Japanese Patent Application No. JP 10-179622 A2 published 07/98
- (55) PCT International Publication No. WO 00/38582 A1 published 07/06/00
- (56) PCT International Publication No. WO 98/48717 A1 published 11/05/98
- (57) PCT International Publication No. WO 99/23963 A1 published 05/20/99

(58) PCT International Publication No. WO 01/30248 A1 published 05/03/01

Other Documents

- (59) Goh JC, et al., "Influence of PLIF cage size on lumbar spine stability", Spine, 2000 Jan 25:1, Medline abstract - one page.
- (60) Head WC, "Wagner surface replacement arthroplasty of the hip. Analysis of fourteen failures in forty-one hips", J Bone Joint Surg [Am], 1981 Mar 63:3, Medline abstract - one page.
- (61) Khoo LT, et al., "A Biomechanical Analysis of the Effects of Lumbar Fusion on the Adjacent Vertebral Motion Segment", Proceedings of the 2000 Annual Meeting of the North American Spine Society, New Orleans.
- (62) Kotani Y, et al., "The effects of spinal fixation and destabilization on the biomechanical and histologic properties of spinal ligaments. An in vivo study", Spine, 1998 Mar 15 23:6, Medline abstract - one page.
- (63) Lemaire JP, et al., "Intervertebral Disc Prosthesis: Results and Prospects for the Year 2000", Clinical Orthopaedics and Related Research, Number 337, PP. 64-76.
- (64) Nagata H, et al., "The effects of immobilization of long segments of the spine on the adjacent and distal facet force and lumbrosacral motion", Spine, 1993 Dec. 18:16, pp. 2471-2479.
- (65) Nibu K, et al., "Multidirectional stabilizing potential of BAK interbody spinal fusion system for anterior surgery [see comments]", J Spinal Discord, 1997 Aug 10:4, Medline abstract - one page.
- (66) Tsantrizos A, et al., "Segmental stability and compressive strength of posterior lumbar interbody fusion implants", Spine, 2000 Aug 1 25:15, Medline abstract - one page.
- (67) Reiley, M.A., U.S. Patent Publication No. US2002/0123806A1, September 5, 2002.

Copies of these documents, which are listed on the accompanying Form PTO-1449 (five pages), are enclosed herewith. Applicants respectfully request that these documents be fully considered by the U.S. Patent and Trademark Office during the examination of this application and printed on any patent which may issue on this application. Applicants also respectfully request that a copy of Form PTO-1449 (five pages), as considered and initialed by the Examiner, be returned to the undersigned with the next communication.

It is believed that this disclosure complies with the requirements of 37 CFR 1.56, 1.97 and 1.98. If for any reason the Examiner considers otherwise, it is respectfully requested that the undersigned be contacted by the Examiner by telephone in order that any deficiencies may be expeditiously remedied.

The enclosed documents may have markings thereon. Applicants are not presently aware of the source of those markings, and no significance is meant to be attached thereto.

Please charge any additional fees due in connection with this submission, or credit any overpayment, to Deposit Account No. 16-0221. A duplicate copy of this submission is enclosed for the convenience of the Examiner.

Thank you.

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NOVEMBER 14, 2002

(DATE OF DEPOSIT)

JAMES A. SHERIDAN

(NAME OF ATTORNEY)

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NOVEMBER 14, 2002

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Respectfully submitted,

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